



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,519	06/19/2003	Kevin J. Murphy	42P16523	8605
8791	7590	02/08/2008		
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER SHAND, ROBERTA A	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 02/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/600,519

Applicant(s)

MURPHY ET AL.

Examiner

Roberta A. Shand

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/24/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 8, 12-15, 19, 23-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Mandin (U.S. 2004/0100979 A1).

3. Regarding claims 1, 12 and 23, Mandin teaches (fig. 4) a method, comprising: determining, by a device that shares an upstream channel (26) with other devices, whether based, at least in part on particular data, an upstream channel data transfer rate can be improved over a current data transfer rate of a current upstream channel from the device to a remote system (fig. 1); and improving by the device, if the upstream channel data transfer rate can be improved, the upstream channel data transfer rate based, at least in part, on the particular data (abstract).

4. Regarding claims 2, 13 and 24, Mandin teaches (fig. 1) the device that shares the upstream channel with other devices comprises a cable modem.

5. Regarding claims 3, 14, 25 and 29, Mandin teaches (fig. 1) the remote system comprises a cable modem termination system (CMTS).

6. Regarding claims 4, 15 and 28, Mandin teaches (fig. 4) particular data comprises cable modem transmit queue (28) capacity data.

7. Regarding claims 8 and 19, Mandin teaches (fig. 1) the particular data comprises upstream channel bandwidth data transmitted from the CMTS.

8. Regarding claim 26, Mandin teaches (fig. 1) a system, comprising: a cable modem termination system, to transmit and receive data packets; customer premise equipment (12), to receive the data packets from the CMTS (14) and transmit the data packets to the CMTS (14); a cable modem (16), coupled with the CMTS (14) and the CPE (12), to determine whether, based at least in part on particular data, an upstream channel data transfer rate can be improved over a current data transfer rate of a current upstream channel from the cable modem (16) to the CMTS (14), and improve, if the upstream channel data rate can be improved (abstract), the upstream channel data transfer rate based, at least in part, on the particular data (fig. 4); and a coaxial cable, to couple the cable modem with the CMTS (14) and transmit the data packets between the cable modem (16) and the CMTS (14).

9. Regarding claim 27, Mandin teaches (fig. 1) the cable modem (16) is integrated with the CPE.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5-7 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandin in view of Lansing (U.S. 203/0058795 A1).

12. Regarding claim 5 and 16, as mentioned above, Mandin teaches all of the limitations of claim 1.

13. Mandin does not teach determining whether the upstream channel data transfer rate can be improved comprises determining whether the transmit queue capacity data indicates that the transmit queue is full.

14. Lansing teaches (paragraph 43) determining whether the transmit queue capacity data indicates that the transmit queue is full. It would have been obvious to one of ordinary skill in the art to adapt this to Mandin's system to reduce congestion within the system.

15. Regarding claims 6 and 17, Lansing teaches (paragraph 43) if the transmit queue capacity data indicates that the transmit queue is full: determining whether a capacity of the transmit queue is at a maximum capacity; and increasing the capacity of the transmit queue, if the capacity is not at the maximum capacity (paragraph 39).

16. Regarding claims 7 and 18, Lansing teaches (paragraph 43) if the transmit queue capacity data indicates that the transmit queue is full: determining whether a capacity of the transmit queue is at a maximum capacity; and initiating a service flow, if the capacity of the transmit queue is at the maximum capacity (paragraph 39).

17. Claims 9-11 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandin in view of Horton (U.S. 6236678 B1).

18. Regarding claims 9-11 and 20-22, as mentioned above, Mandin teaches all of the limitations of claim 8.

19. Mandin does not teach the bandwidth data comprises an upstream channel descriptor (UCD) message and an upstream bandwidth allocation map (MAP) message.

20. Horton teaches the bandwidth data comprises an upstream channel descriptor (UCD) message and an upstream bandwidth allocation map (MAP) message. It would have been obvious to one of ordinary skill in the art to adapt this to Mandin's system as this is well known in the art.

Conclusion


21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A. Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberta A Shand
Examiner
Art Unit 2616



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600